Mobility with Care in Novel Coronavirus (COVID-19) Crisis

Center for Supply Chain Research®, Penn State University
Agenda

- Introduction
- Guest expert
- Breakouts
- Breakouts recap
- Q&A / Open forum
Key Developments Impacting Transportation and Logistics Operations

**China production recovery**
Companies in China are resuming their normal productions.

**More Stringent Restrictions by US Government**
Social distancing; Shelter-in-place orders; Non-essential business closure; Land border closing

**Surge in Online Grocery Shopping**
(including home delivery and buy-online-pickup-in-store)

International freight volume could begin to increase as Chinese exports pick up.

Role as “essential” business with increased operational complications driven by more stringent restrictions and worker health risks.

Increased pressure on online order fulfillment and last-mile delivery.
Ocean Freight Transport Condition: Demand and Supply

**DEMAND**

- **Sign of recovery**
  - The number of announced blank sailings has fallen compared with recent weeks.
  - Demand for ocean freight transport on various trades is ramping up with improved utilization of vessels.
  - NVOs expect US imports to increase steadily in April compared to the first three months of 2020, first to the West Coast and then in late-April and May to the East Coast.

**SUPPLY**

- **Space constrictions anticipated**
  - Significant number of ocean carrier blank sailings remains. Blank sailings are expected to decrease by end of April.
  - Vessels departing China remained few, expecting US export capacity shortage
- **US port and terminal reduced operating hours due to decline in freight volume**
- **Equipment shortages**
  - Shipping container shortages for US export due to blank sailings
  - Backlog of empty containers to increase cost for importers
Ocean Freight Transport Condition: Rate and Surcharge

- **General rate increase.** Carriers have implemented a GRI for March 15, 2020. More recent announcement suggesting GRIs for almost every trade due to equipment and capacity shortages, expected to go into effect on April 1 from ports from inland origins.

- **Equipment-related surcharge.** Some carriers have announced Equipment Imbalance Surcharges (EIS) or Equipment Reposition Charge (ERC) to address repositioning of empty containers to deficit areas.
# Air Cargo Transport Condition: Demand, Supply, Rates

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<tr>
<th><strong>DEMAND</strong></th>
<th><strong>SUPPLY</strong></th>
<th><strong>Freight Rates</strong></th>
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| • Outbound air freight demand from China increases  
  - All mainland China export markets picking up as production resumes (nearing full production by the end of March)  
  - Ocean-to-air conversions trend exacerbates demand for outbound China  | • Worldwide air cargo capacity still scarce as passenger flight cancellations sustained  
  • More freighters are entering the market, helping ease the outbound China capacity strain.  
  • US market capacity crunch due to passenger flight cancellation, shutdown of all domestic flights possible | • **US-Europe.** Rates are currently double or triple normal levels. Due to fluctuations, shipments are quoted with spot rates.  
• **US-China.** Rates to and from China have spiked, double or more the normal levels, as space is limited and carriers rush to address backlogs and rapid demand. |
US Truck Transport Condition: Demand, Supply, Rates

**Demand**
- Demand varies by types of freight: Essential vs. Non-essential goods
  - High demand for services of essential cargo
  - Decreased demand for services of non-essential cargo

**Supply**
- A surge in Chinese imports is expected to put pressure on truck capacity at some point in April and May
- Expected capacity crunch after non-essential business closure restriction lifted
- HOS exemption, when lifted, could intensify driver shortages.

**Freight Rates**
- Significant short-term spikes in truck freight rates due to increasing demand for certain goods.
- If spot prices remain elevated into late spring, shippers may see contract rates start to move upward this summer.
US Truck Transport Condition: Emerging Operational Challenges

**Land border crossing**
- Truck drivers will face additional scrutiny and questioning at US/Canada and US/Mexico borders.
- US-bound truck drivers that have returned from a known international “hot spot” for the virus in the past 14 days will be denied entry.

**Drivers facing new procedures and restrictions at pickups/receiving docks**
- **Social distancing measures to document pickups and deliveries.** Some customers are asking drivers to stay in their trucks or switch from paper to electronic methods to document pickups and deliveries.
- **Coronavirus hot zone restriction.** Drivers are facing new restrictions at receiving docks if they have been in states considered coronavirus hot zones. This has led to some drivers unwilling to haul loads to states such as New York or Washington.

**Rest stops reduced services and closure**
- **Reduced services.** Most major truck-stop chains and many independent truck stops remain open, although some have closed sit-down restaurants and switched to preparing food for pickup or takeout.
- **Closures in PA.** On Tuesday, March 17, Pennsylvania closed its state-run rest stops, cutting back significant parking space along key logistics corridors; 13 rest areas reopened March 19 for truck parking with portable toilets.
Transport and Logistics Workforce Condition

Workforce shortages are driving aggressive hiring in transport- and logistics-related positions. Here are some examples:

- **7-Eleven** – 20,000 jobs
- **Amazon** – 100,000 warehouse and delivery positions, with two increased pays announced in a week
- **Domino’s Pizza** – 10,000 workers for delivery drivers, pizza makers, managers and truck drivers
- **Kroger** – 10,000 people across its retail stores and DCs
- **Lineage Logistics** – 2,000 additional workers
- **Papa John’s** – 20,000 team members to deliver meals and carryout
- **Walmart** – 150,000 hourly associates for roles at stores, clubs, distribution facilities, and fulfillment centers, with special bonuses offered
Protecting Essential Transport and Logistics Workforce

- **Temperature and symptoms screening.** All visitors, vendors, contractors, carrier partners, and drivers are screened before entering the facilities.

- **Quarantine policy.** If the employee tests positive for coronavirus, a 14 days quarantine is applied, along with all other employees who are working in the same workplace or who have a direct contact (within 1 meter), face to face with the employee.

- **Sanitize equipment, facilities, and vehicles,** with emphasis on frequent touchpoints

- **Introduce social distancing measures in workplace/worksite.** Variations in practice, such as spread out tables in break rooms, work stations; spread out shifted start times and break times; change format of meeting to small gathering

- **Ensure workers have necessary equipment and sanitation supplies**

- **Change procedure to handle deliveries requiring a signature.** Approaches range from eliminating signature requirement to using mobile App for no-touch delivery signature (customers sign on their own mobile device)
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